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Page 9

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seq\_name: gb\_ro:AF048976

seq\_documentation\_block: AF048976

LOCUS Rattus norvegicus synaptic ras GTPase-activating protein p135  
DEFINITION SynGAP mRNA, complete cds.

ACCESSION AF048976

VERSION AF048976.1

KEYWORDS GI:2935447

SOURCE Norway rat.

ORGANISM Rattus norvegicus

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

TITLE Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;

1 (bases 1 to 4063)

Chen, H.-J., and Kennedy, M.B.

Identification and cloning of a novel 130 kD protein containing a

ras GTPase-activating domain from the rat forebrain postsynaptic

density

(J. SOC. NEUROSCI. ABSTR.: 1466; (1997))

2 (bases 1 to 4063)

Chen, H.-J., and Kennedy, M.B.

A synaptic Ras GTPase-activating protein (p135 SynGAP) inhibited by

Cam kinase II

Unpublished

3 (bases 1 to 4063)

Chen, H.-J., and Kennedy, M.B.

Direct Submission

Submitted (17-FEB-1998) Division of Biology, California Institute

of Technology, 1200 E. California Blvd., MC 216-76, Pasadena, CA

91125, USA

Location/Qualifiers

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/organism="Rattus norvegicus"

/strain="Sprague-Dawley"

/db\_xref="taxon:10116"

122..4003

/function="prominent substrate for endogenous CamKII; can

activate intrinsic ras GTPase activity"

/note="synaptic ras-GAP; N-terminal encodes putative PH

domain, C2 domain, and ras-GAP domain; C-terminal encodes

proline-rich region, stretch of 10 histidine residues, and

t/SXV motif; enriched in the forebrain postsynaptic

density fraction"

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SynGAP"

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Backhandale

Seq to  
No 2

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ORIGIN

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Ratio: 5.244

Percent Similarity: 99.924 Percent Identity: 99.924

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US-09-294-298-2 x AF048976

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seq_documentation_block:		
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DEFINITION	<i>Rattus norvegicus</i> mRNA for syncap-d, complete cds.	

AB016962  
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 AB016962.1  
 GI:4417206  
 synGAP-b1.  
 KEYWORDS  
 RATTUS NORVEGICUS (sub species: Sprague Dawley) CDNA to mRNA.

SOURCE	Rattus norvegicus (brown rat)
ORGANISM	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Muridae; Murinae; Rattus.

REFERENCE  
1 (bases 1 to 4801)  
Nucleus.

**AUTHORS** Suzuki, T.

**TITLE** SynGAP-d

**JOURNAL Published Only in DataBase (1999) In press**

REFERENCE 2 (bases 1 to 4801)

**AUTHORS** Suzuki, T.  
**TIME** Direct Sub

**TITLE** Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases. Tatsuo Suzuki, Shinsu University School of Medicine, department of Neuroplasticity; 3-1-1 Asahi, Matsumoto, Matsumoto, 390-8621, Japan (E-mail: suzuki@sch.md.shinsu-u.ac.jp, Tel: +81-263-37-2683, Fax: +81-263-37-2725).

COMMENT  
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ON MAR 10, 1999, THIS SEQUENCE  
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## FEATURES

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	DEFINITION	<i>Rattus norvegicus</i>	synaptic ras	GTPase-activating protein p135	27-MAR-1998

ACCESSION	AF048976
VERSION	AF048976.1 GI:2935447

SOURCE	ORGANISM
Norway rat.	<i>Rattus norvegicus</i>

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;  
Rattus.

AUTHORS	Chen, H.-J. and Kennedy, M.B.
TITLE	Identification and cloning of a novel 130 kd protein containing

JOURNAL OF NEUROSCIENCE SOCIETY. ABSTRACTS: 1466; (1997)

**AUTHORS** Chen, H.-J., Rojas-Soto, M., and Kennedy, M.B.  
**TITLE** A synaptic Ras GTPase-activating protein (p135 SynGAP) inhibits

JOURNAL Unpublished  
REFERENCE 3 (bases 1 to 4063)

TITLE	Direct Submission	Submitted (17-FEB-1998)	Division of Biology, California Institute of Technology

**SEAMINDES**  
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VI TECHNOLOGY, 1400 E. CALIFORNIA BLVD., MC 210 70, PASADENA,  
91125, USA

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 LOCUS Rattus norvegicus mRNA for synGAP-d, complete cds.

DEFINITION AB016962  
 VERSION AB016962.1 GI:4417206  
 KEYWORDS synGAP-b1

SOURCE Rattus norvegicus (sub-species: Sprague Dawley) cDNA to mRNA.  
 ORGANISM Rattus norvegicus

REFERENCE 1 (bases 1 to 4801)  
 AUTHORS Suzuki, T.  
 TITLE SynGAP-d  
 JOURNAL Published Only in DataBase (1999) In press

REFERENCE 2 (bases 1 to 4801)  
 AUTHORS Suzuki, T.  
 TITLE Direct Submission  
 JOURNAL Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases, Tatsuo Suzuki, Shinshu University School of Medicine, Department of Neuroplasticity, 3-1-1 Asahi, Matsumoto, Nagano 390-8621, Japan (E-mail: suzuki@sch.md.shinshu-u.ac.jp, Tel: +81-263-37-2683, Fax: +81-263-37-2725)

COMMENT On Mar 16, 1999 this sequence version replaced gi:4239945.  
 Sequence updated (09-Feb-1999).

FEATURES  
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seq\_name: gb\_ro:AB016962

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LOCUS AB016962 Rattus norvegicus mRNA for synGAP-d, complete cds.

DEFINITION AB016962 Rattus norvegicus mRNA for synGAP-d, complete cds.

ACCESSION AB016962

VERSION AB016962.1 GI:4417206

KEYWORDS synGAP-d.

SOURCE Rattus norvegicus (sub\_species:Sprague Dawley) cDNA to mRNA.

ORGANISM Rattus norvegicus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;

Rattus.

1 (bases 1 to 4801)

Suzuki,T.

SynGAP-d

Published Only in DataBase (1999) In press

2 (bases 1 to 4801)

Suzuki,T.

Direct Submission

Submitted (14-AUG-1998) to the DDBJ/EMBL/GenBank databases, Tatsuo

Suzuki, Shinshu University School of Medicine Department of

Neuroplasticity, 3-1-1 Asahi, Matsumoto, Nagano 390-8621 Japan

(E-mail:suzukit@sch.mdm.shinshu-u.ac.jp, Tel:+81-263-37-2683,

Fax:+81-263-37-2725)

On Mar 16, 1999 this sequence version replaced gi:4239945.

Sequence updated (09-Feb-1999).

Location/Qualifiers

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BASE COUNT 1043 a 1477 c 1314 g 967 t
ORIGIN

alignment_scores:
Quality: 6280.50
Ratio: 5.178
Percent Similarity: 99.020
Percent Identity: 98.857

alignment_block:

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Align Seq: AR010302 110m: 1 CO: 4501

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1136	CCCGTCGCGCCTTCGGGCCCTCGCAAGGCTTCTCAGCGCGAGCTAAA 1185
25	sSerSerIleLeuArgThrLySerGlnProLyLeuAspArgThrSerS 42
1186	AAGTCCTCATCAACGTACAAAGTCACAACCAACCAACCTTGACCGGACGACA 1235
42	erPheArgGlnIleLeuProArgPheArgSerAlaAspHisAspArgala 58

1236	GCTTTCGACAGATCCCTGCTCGCTTCGGAAGTGTGACCTGACCGGCCC	1285
59	ArgLeuMetGlnSerPheLysGluSerHisSerHisGluSerLeuLeuSe	75
1286	CGGTGATGCAGAGCTTCAAGGAGTCTCACTCCCATGAGTCCCTGCTGAG	1335
75	rProSerSerAlaAlaGluAlaLeuGluLeuAsnLeuAspGluAspSerI	92
1336	TCCACGAGTGTGCTGAGGCCCTGGAGCTCAACCTGGATGAAGACTCCA	1385
92	lelleysprovalHisSerSerIleLeuGlyClnGluPheCysPheCln	108
1386	TTATCAAGCCAGTACACAGCTCCCATCTCGGCCAGGAGTCTGCTTTGAG	1435
109	ValThrThrSerSerGlyThrLysCysPheAlaCysArgSerAlaAlaG1	125

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